

ABSTRACT OF DISCLOSURE

The invention relates to a silicon substrate comprising positive etching profiles with defined slope angle. Said silicon substrate is obtained by etching the silicon substrate that is covered with a mask and by carrying out the following steps: a) the silicon substrate is isotropically etched, the undercut u of the mask being approximately identical to the etching depth A_t ; b) the etching depth is increased by means of anisotropic etching in alternating etching steps and polymerization steps during which the undercut of the mask remains constant and the etching front follows a new course, the sidewalls of the structure being coated with a polymer in said step; c) the polymer is removed from the structure; and d) steps a) to c) are repeated until the predefined etching profile has been obtained. Also disclosed is a method.